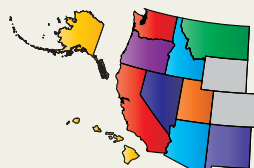


Drought and Wildland Fire Policy

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Western States Drought Coordinators and Emergency Managers Meeting
Seattle, WA 22 July 2015



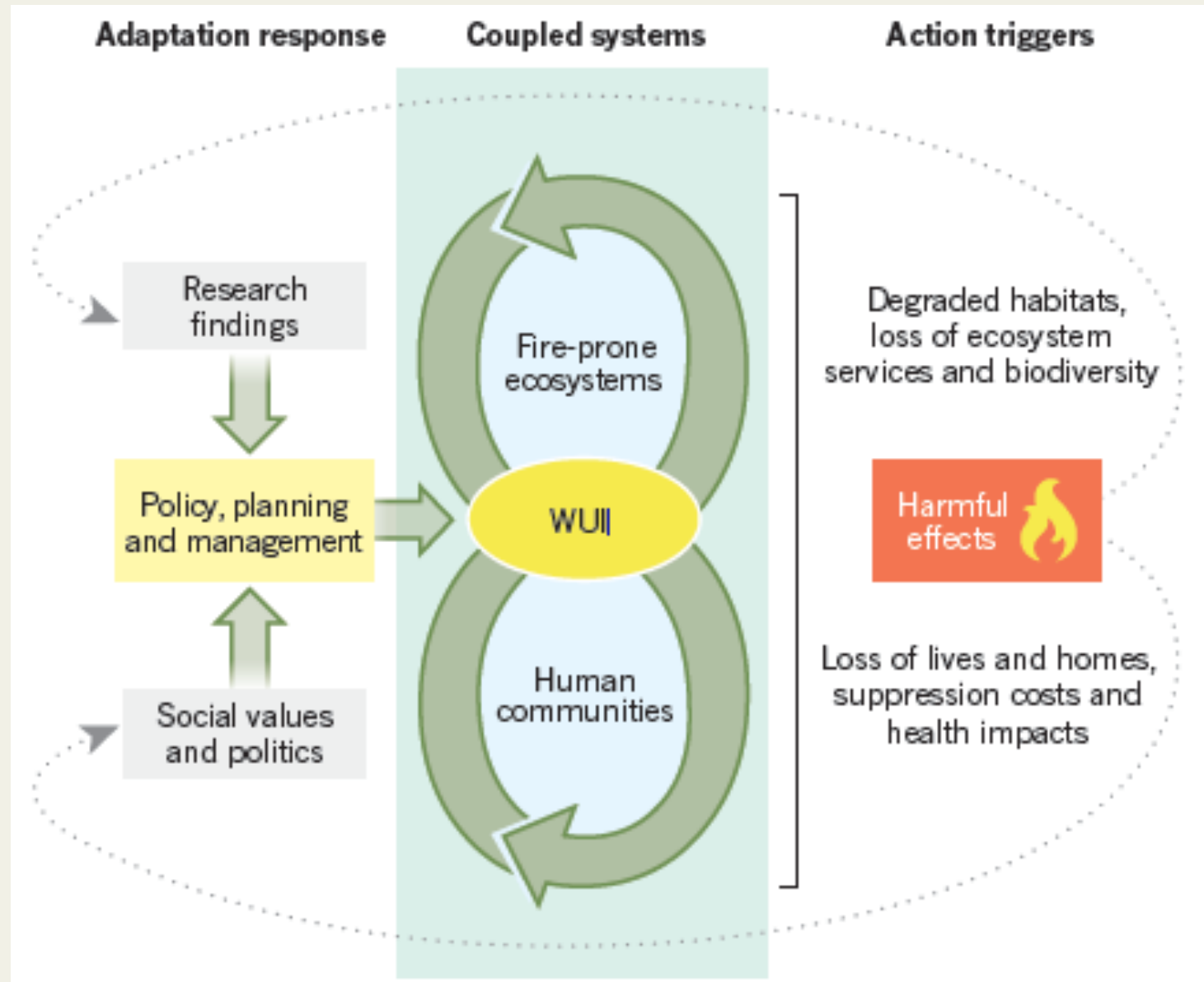
Can you see the forest through the numbers?




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graph TD; GW[Global warming] --> HTD[Higher temperatures and more severe and extended droughts]; GW --> FE[Fire exclusion]; GW --> O3[Ozone]; HTD --> BBD[Bark beetles and defoliators]; HTD --> PJP[Ponderosa and Jeffrey pine mortality]; FE --> HSD[High stand densities]; FE --> FA[Fuel accumulation]; O3 --> PJP; BBD --> FA; HSD --> FA; FA --> LSF[Large severe fires]; PJP --> CSC[Changes in species composition (including exotics)]; LSF --> CSC;
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Source: National Climate Assessment – Forest Sector Report - 2012

One perspective of the human-physical fire system



The beginning of U.S. wildland fire policy

1638

Massachusetts Bans Smoking Outdoors

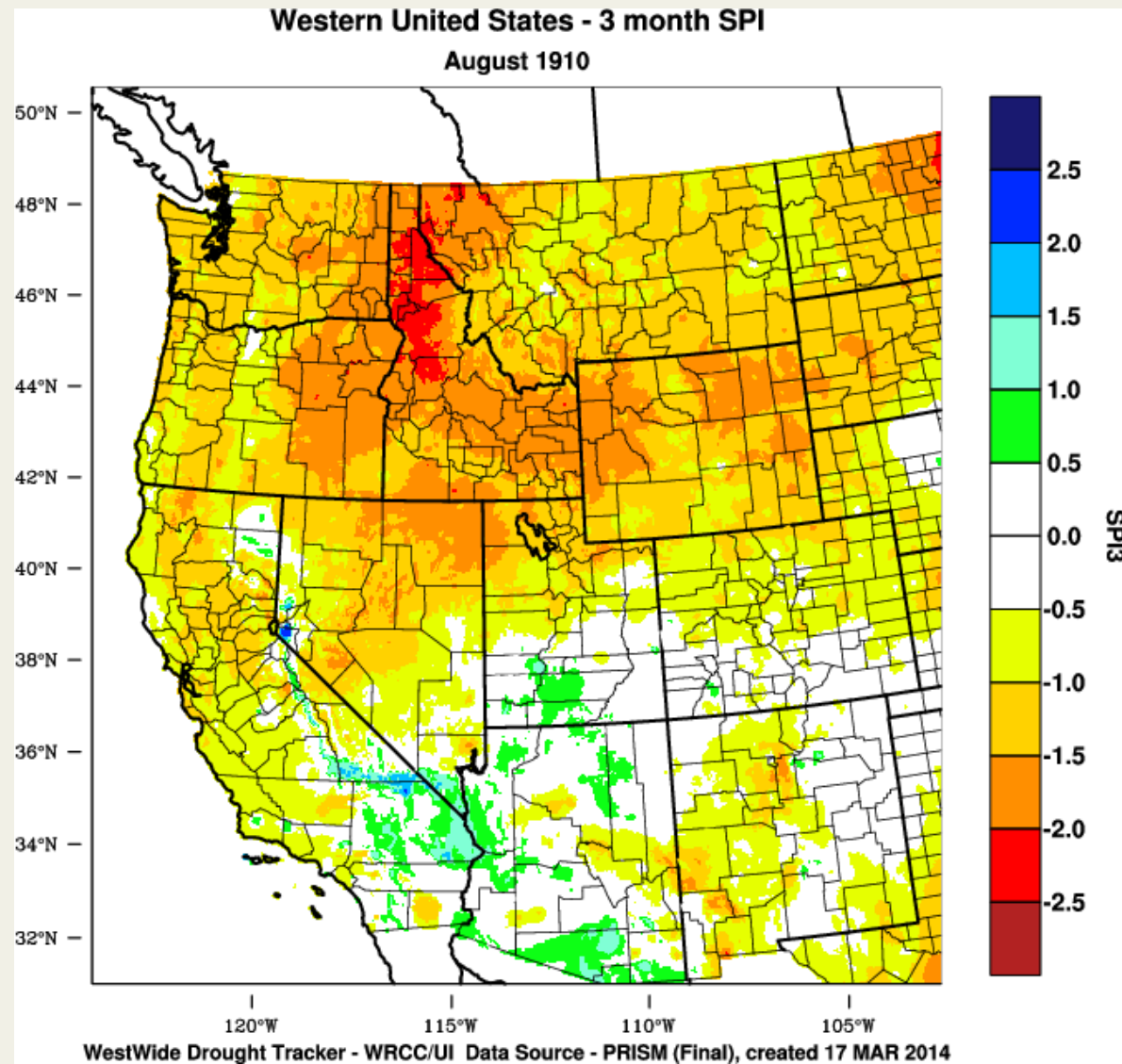
Massachusetts passed first law banning smoking outdoors. Passed because of heightened awareness of fire and associated devastation.



Line drawing of city street scene in 1686. Courtesy of New York State Museum.

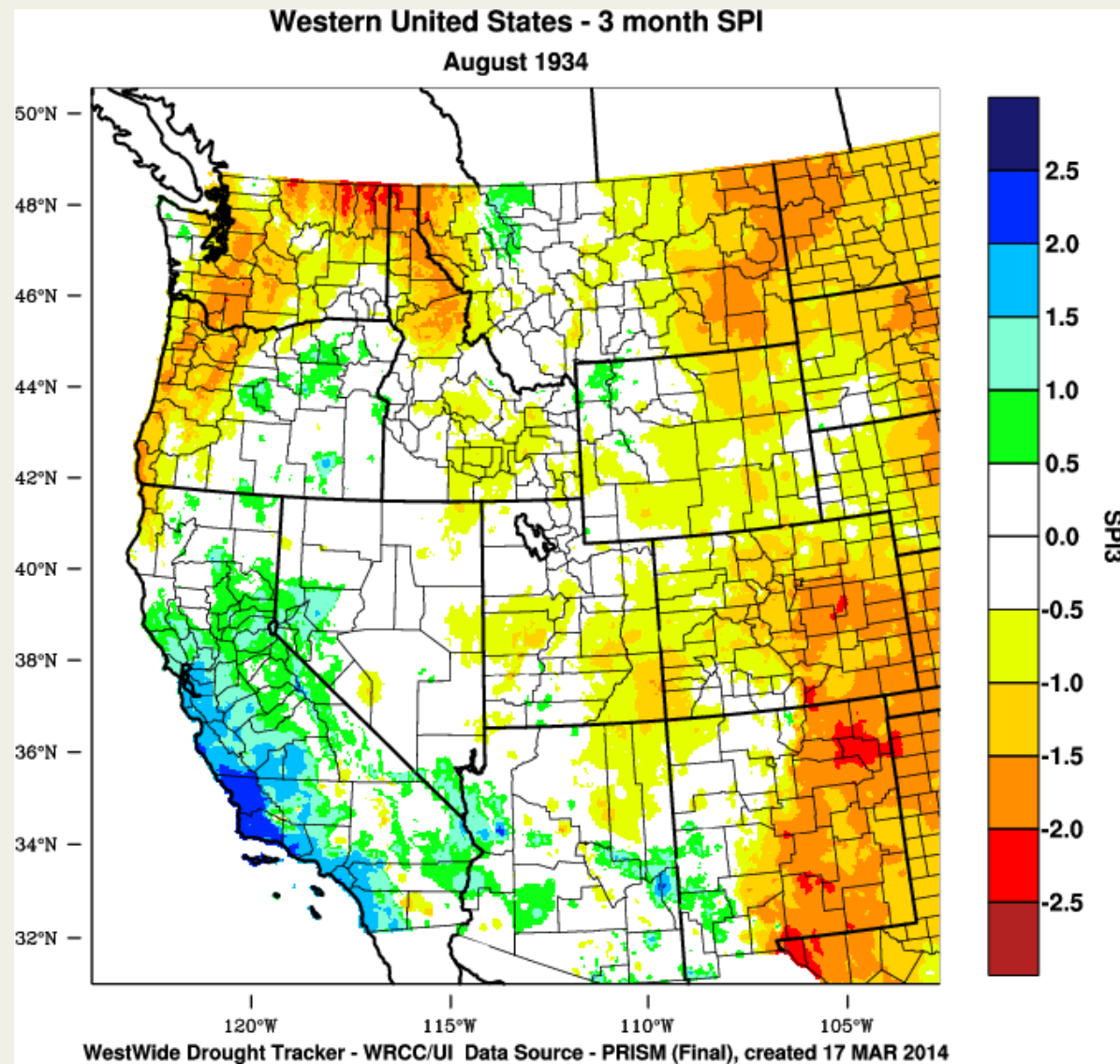
1910

- Forest Service Chief Henry Graves issued bulletin Protection of Forests from Fire that declared "The first measure necessary for the successful practice of forestry is protection from forest fires"
- 1911 - The Weeks Act passed by Congress, allowing the USFS to cooperate with states in fire protection, creating the first interagency wildland fire fighting effort
- 1911 - Forest administrator in Florida National Forest, I.F. Eldridge, broke with convention by using fire to reduce hazardous fuels in longleaf pine stands



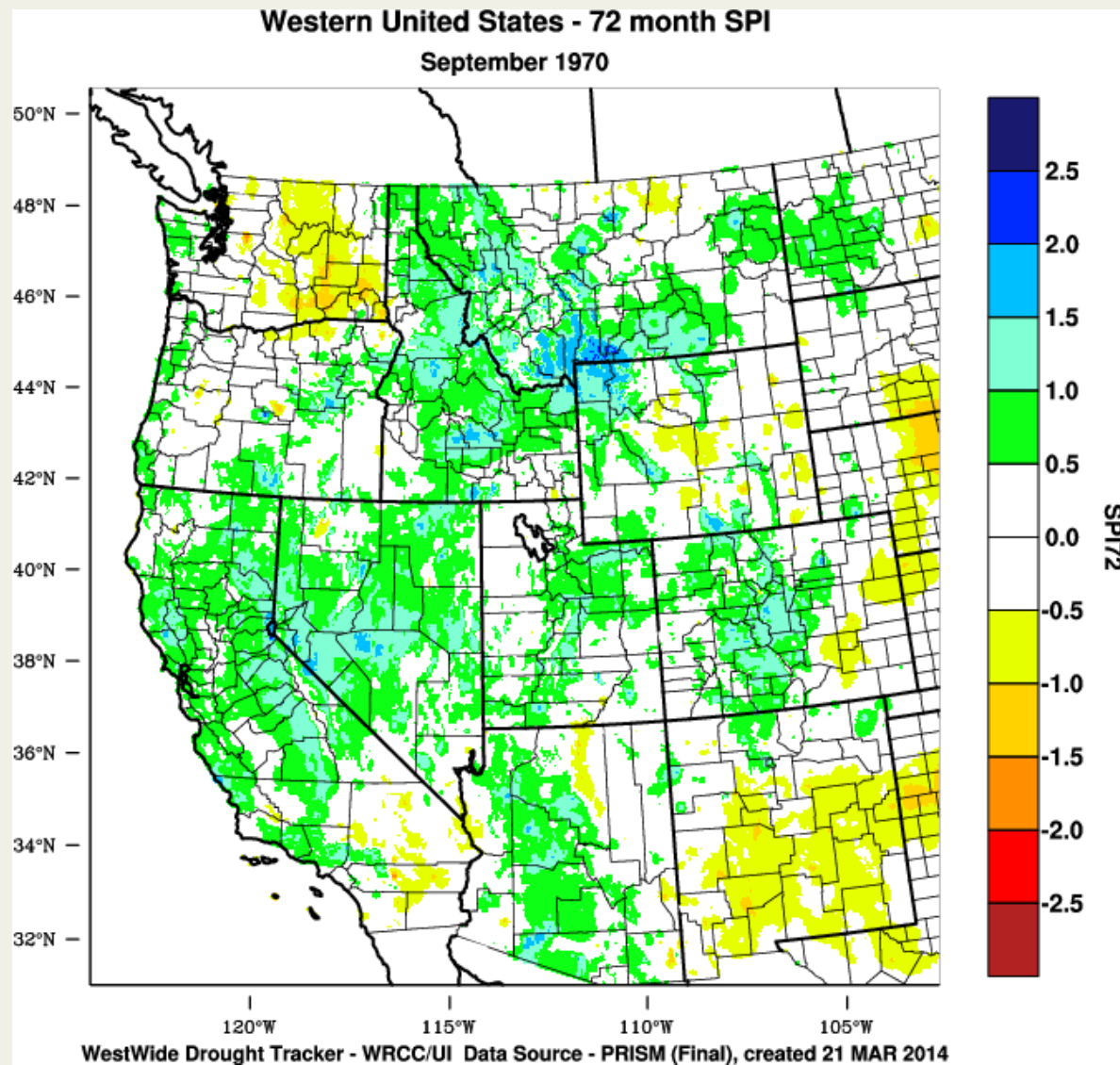
1934

- 1933 - Civilian Conservation Corps (CCC) established "...that the unemployed could work for the prevention of forest fires and for soil erosion, flood control, removal of undesirable plants, insect control, and construction or maintenance of paths, tracks, and fire lanes on public lands."
- 10 A.M. Policy adopted by US Forest Service which stipulated that a fire was to be contained and controlled by 10 a.m. following the report of a fire, or failing that goal, control by 10 a.m. the next day and so on



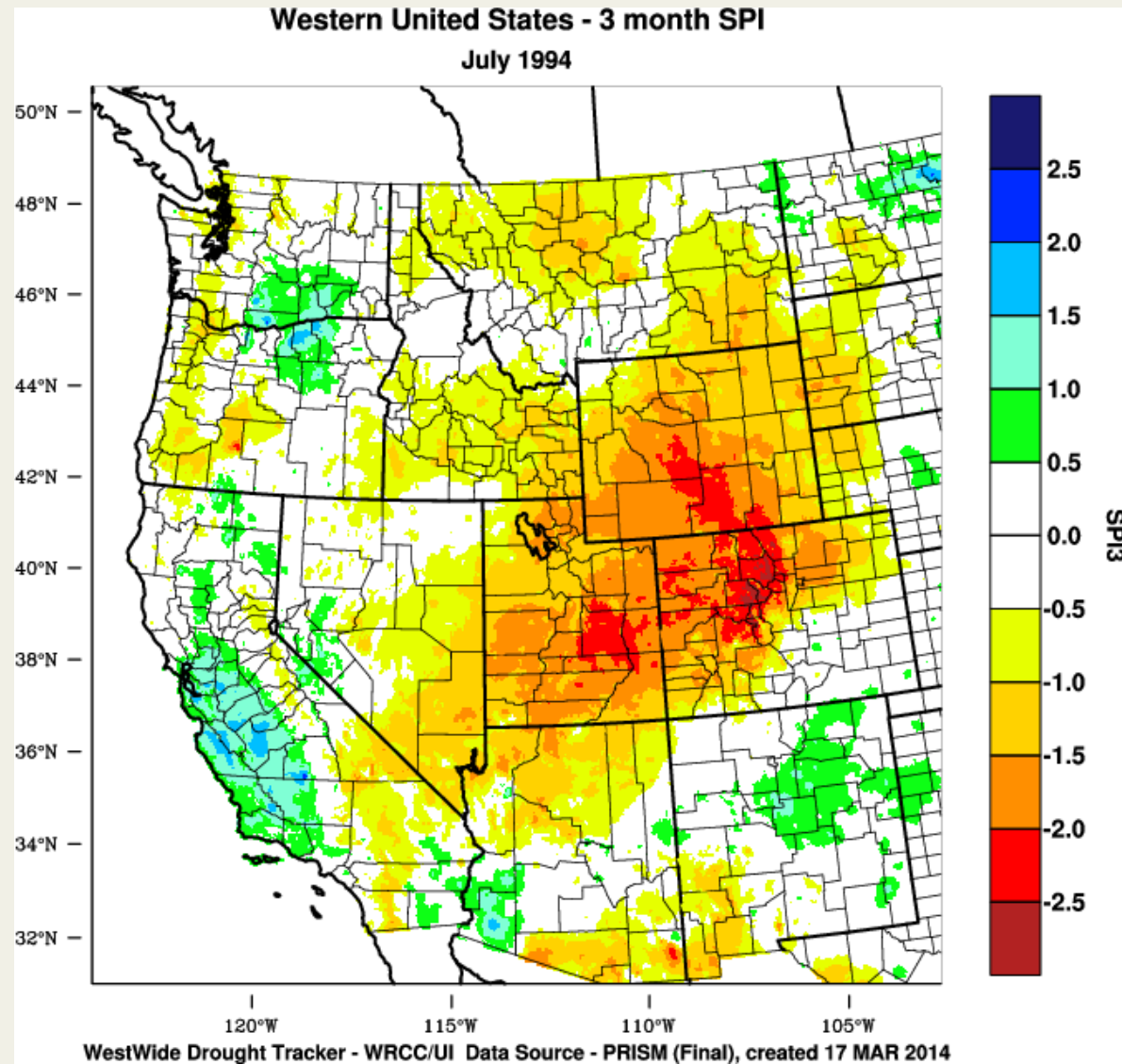
1971

- U.S. Forest Service modified its suppression policy and begins initiating natural fire experiments



1994

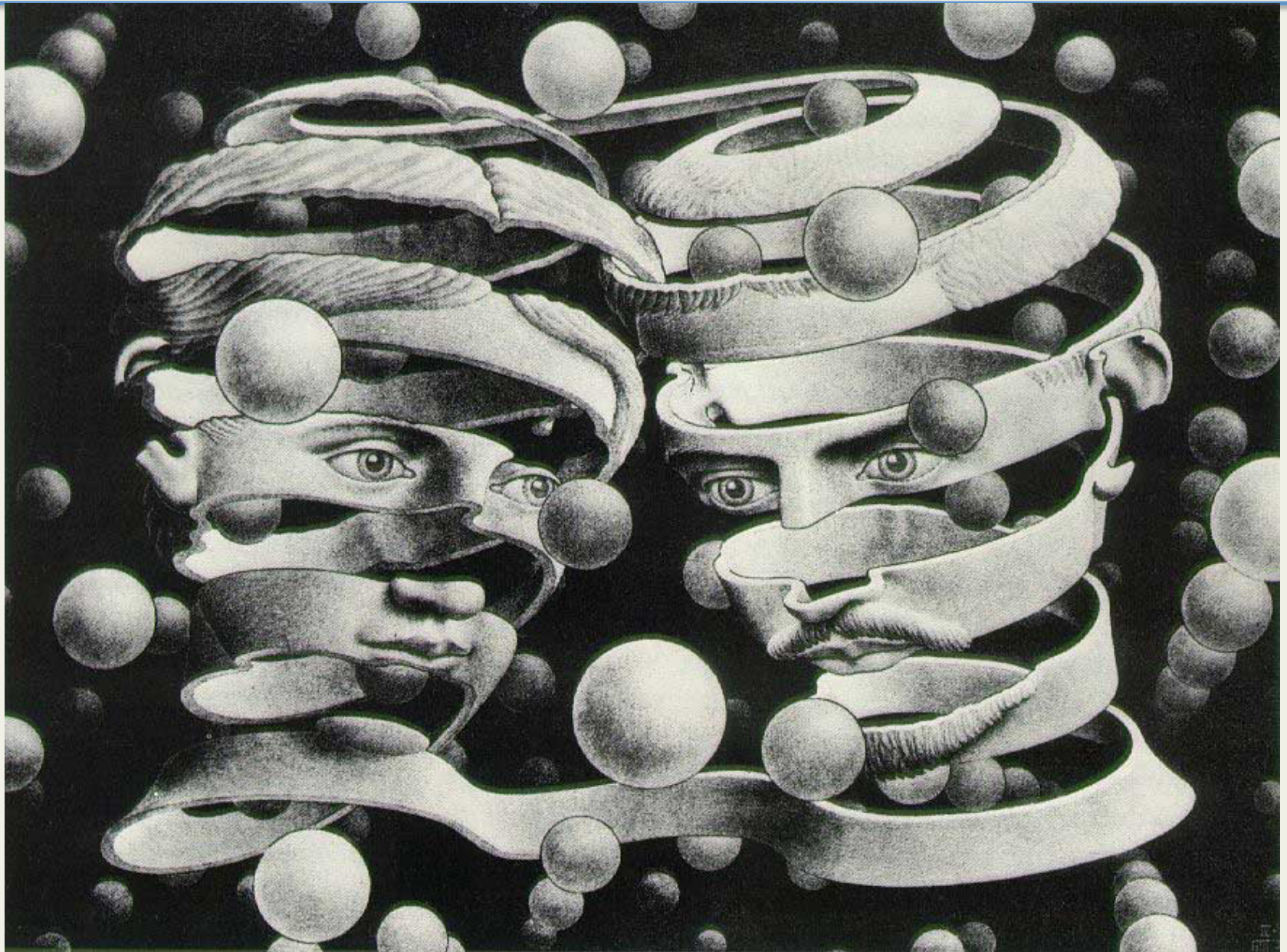
- 1994 - An interagency team was formed to investigate the fatalities (14) and contributing factors to the South Canyon Fire



And then the 2000s

- High impact fires in Arizona, California, Idaho, New Mexico, Oregon, Utah, Washington
- Seemingly a convergence of climate, fuels and people
- Talk of increasing climate and fire extremes
- Changes in fire suppression tactical strategies
- Threats begin outpacing responses
- Institutional competing resources and requirements
- Development of a fire-industrial complex

There are now a lot of things to wrap around your head



Bond-of-Union MC Escher, 1956

The eras

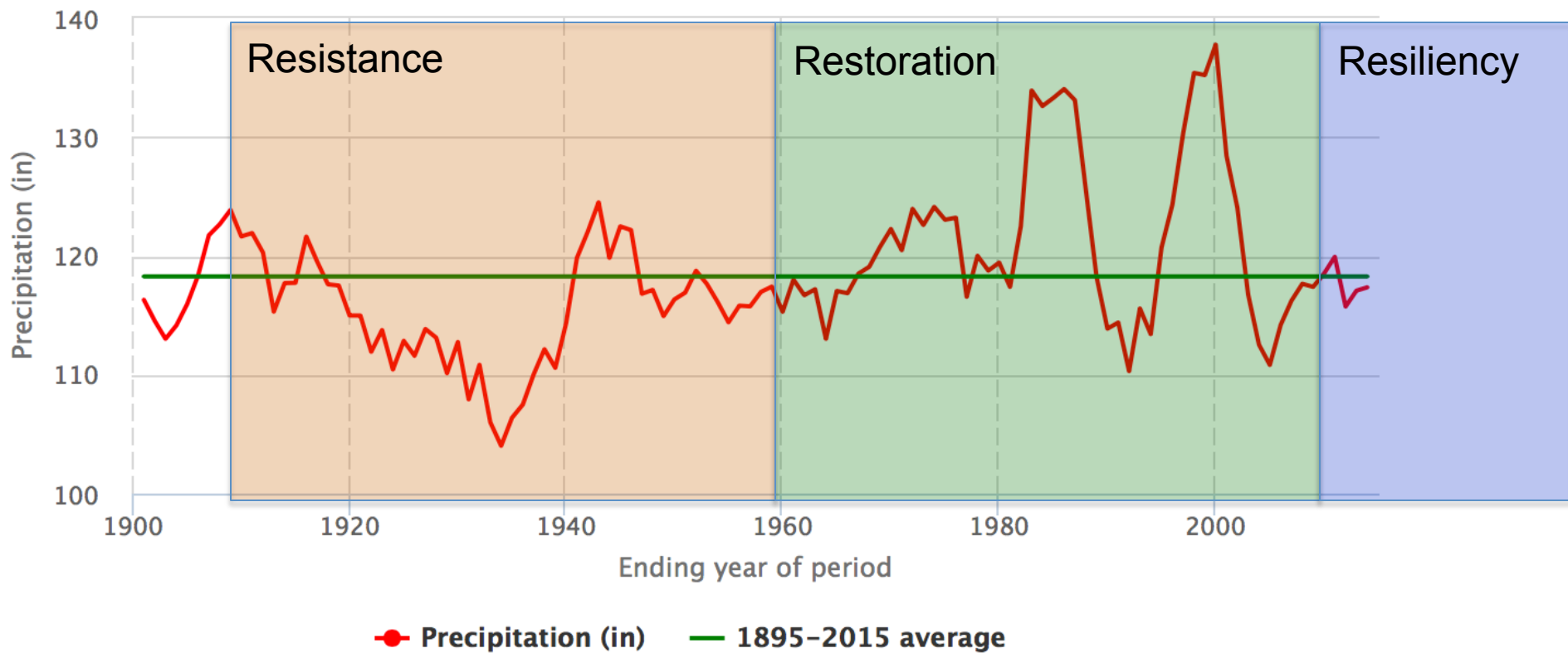
- Resistance (1910-1960)
 - Fire exclusion and aggressive suppression
- Restoration (1960-2010)
 - Fire by prescription
- Resiliency (2010-???)
 - Acceptance that we are not going to get ahead of the fire problem overall
 - Too many variables in motion; fire community controls too few of these variables

The eras

Total Precipitation for Western United States



72 month period ending in September



Highcharts.com

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* Previous page with saved values.

72-Month Period Ending in September

Addressing the MOU

From the WGA/NOAA MOU: The Parties will investigate the interrelationship between drought and wildfire to identify the data, information, and analysis needs – as well as management strategies – that may help Governors and decision-makers better address the impacts associated with these dual disasters.

Addressing the MOU

- How best to communicate the information?
- What does increased drought (and other climate/ weather extremes) mean in a new era of resilience?
- How can drought and fire be linked in an early warning information system?
- How can drought information fit effectively into mitigation and adaptation planning?
- Where does drought fit in the complex human-physical fire system?
- What opportunities can drought provide for fire management?

